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 AN 80:51831 CA
 TI **Calcium silicate** heat-insulating material
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 PA Aica Kogyo Co., Ltd.
 SO Japan. Kokai, 4 pp.
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 DT Patent
 LA Japanese
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 CC 58-3 (Cement and Concrete Products)
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 48085621	A2	19731113	JP 1972-17885	19720221
AB	<p>In manufg. Ca silicate heat-insulating material, small particles produced as a by-product in the manuf. of ferrosilicon and contg. silicic acid at high temps. are used as a SiO₂ raw material. The small particles are blended with slaked lime, quicklime, or a mixt. of the 2 so that the CaO/SiO₂ mole ratio is 0.2-1.5. The blend is mixed well and thoroughly with water contg. 1-20% dispersed, solid, org. fibers by kneading or stirring, molded, and treated at a satd. steam pressure 5-25 kg/cm² and 151-223.degree. for 4-30 hr to yield Ca silicate heat-insulating material. Thus, a heat-insulating material (CaO/SiO₂ mole ratio 0.4) prepd. from slaked lime (CaO 71%) 31, small particles (SiO₂ 88.0%) 68, water 49, and pulp (5%) 5 parts had a bulk d. 0.53 g/cm³, bending strength 40 kg/cm², thermal cond. 0.08 kcal/m hr .degree.C at 25.degree., and a high heat resistance.</p>				
ST	calcium silicate heat insulating				
IT	Thermal insulators				
	(calcium silicate, silica from ferrosilicon manufg. wastes for)				
IT	7631-86-9P, preparation				
	RL: PREP (Preparation)				
	(from ferrosilicon manufg. wastes, for calcium				

		% wt	
lime	31	→ 20%	CaO/SiO ₂ ratio is 0.2-1.5 still in applicables range
SiO ₂	68	→ 44% very close	
H ₂ O	49	→ 32%	
pulp	5	3%	
		153	